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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,574	04/14/2004	Shikio Yoshida	2936-0216PUS1	4815
2292 7590 07/10/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER LU, ZHIYU				
ART UNIT 2618		PAPER NUMBER		
NOTIFICATION DATE 07/10/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

**Office Action Summary****Application No.**

10/823,574

**Applicant(s)**

YOSHIDA ET AL.

**Examiner**

ZHIYU LU

**Art Unit**

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Pre-Appeal Brief Request, filed 03/28/2008, with respect to the rejection(s) of claim(s) 2 and 9 under 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Silver and Eastman et al.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-3, 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver (US Patent#4882745) in view of Eastman et al. (US Patent#5208449).

Regarding claim 2, Johansson et al. teach a wireless transmission and reception card supporting apparatus comprising:

a mount on which a wireless card is mounted (the card where antenna 34 extends from of Fig. 6),

said wireless card comprises a pole-shaped antenna having a longitudinal axis along its length (34 of Fig. 6), a main face that is the surface of the card with the largest area (as shown in Fig. 6),

wherein the longitudinal axis of the pole-shaped antenna is substantially parallel to the main face of the wireless transmission and reception card in a normal use state (as shown in Fig. 6),

wherein, when the wireless transmission and reception card is mounted on the mount, the pole-shaped antenna of the wireless transmission and reception card is set upright substantially in a vertical direction in the normal use state (as shown in Fig. 6), and

wherein, in the normal use state, the pole-shaped antenna of the wireless card never comes below the level of the user's face (34 of Fig. 6)

But, Silver does not expressly disclose the card being a wireless transmission and reception card, wherein comprises a transmitter and receiver that is connected to the pole-shaped antenna.

Eastman et al. teach the card being a wireless transmission and reception card (44 of Fig. 1), wherein comprises a transmitter and receiver that is connected to the pole-shaped antenna (48 within 44 in connection with 52 of Fig. 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate having transceiver contained in a card taught by Eastman et al. into the wireless transmission and reception card of Silver, in order reduce loss with close connection between transceiver and antenna.

Regarding claim 9, Silver and Eastman et al. teach a wireless network terminal as explained in response to claim 1 above, wherein both Silver and Eastman et al. teach a headset (as shown in figures) and an electric appliance (an essential external communication partner with the wireless headset, or 24 of Fig. 1 of Eastman et al.).

Regarding claim 3, Silver and Eastman et al. teach the limitation of claim 2.

Silver teaches wherein the wireless transmission/reception card supporting apparatus is a headset (Fig. 6).

Regarding claim 6, Silver and Eastman et al. teach the limitation of claim 2.

Silver teaches wherein the wireless transmission/reception card supporting apparatus is an electric appliance (headset, Fig. 6).

3. Claims 4, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver (US Patent#4882745) in view of Eastman et al. (US Patent#5208449) and Winstead et al. (US Patent#6301489).

Regarding claims 4, 7 and 10, Silver and Eastman et al. teach the limitations of claims 3, 6 and 9.

But, Silver and Eastman et al. do not expressly disclose the mount is rotatable.

Winstead et al. teach a wireless transceiver having a rotatable mount for an antenna (Figs. 7-7B, column 5 line 62 to column 6 line 47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mount of the receiver unit of Silver and Eastman et al. into rotatable taught by Winstead et al., in order to provide mechanical adjustment to minimize interferences associated with a user and improve sensitivity of the wireless transceiver.

4. Claims 5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silver (US Patent#4882745) in view of Eastman et al. (US Patent#5208449) and Usui (JP11-008893). Regarding claims 5, 8 and 11, Silver and Eastman et al. teach the limitations of claims 3, 6 and 9. Eastman et al. teach wherein said headset includes a pair of earpieces, a bridge that couples together the earpieces in such a way as to bridge over a head of a user in the normal use state (Fig. 1).

But, Silver and Eastman et al. do not expressly disclose a patch antenna arranged in the bridge. Usui teaches having patch antennas arranged in the bridge of a wireless headset for diversity reception method (4 of Fig. 1, Fig. 4, abstract), which obviously can be used with transmitter as well.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate patch antenna on the bridge of wireless headset taught by Usui into the wireless headset of Silver and Eastman et al., in order to achieve diversity method in wireless communication.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ZHIYU LU whose telephone number is (571)272-2837. The examiner can normally be reached on Weekdays: 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Z. L./  
Examiner, Art Unit 2618

/Nay A. Maung/  
Supervisory Patent Examiner, Art Unit  
2618

Zhiyu Lu  
June 30, 2008